

Odisha Power Transmission Corporation Ltd.
Bhubaneswar.



Agenda
for
142nd Power System Operational Co-ordination Meeting

Date: 29.02.2020

Venue: Power Training Center, Chandaka, Bhubaneswar

**Agenda for 142nd PSOC Meeting to be held on 29.02.2020 at OPTCL Power Training Center,
Chandaka, Bhubaneswar**

A. Confirmation of the minutes of the 141th PSOC Meeting held on 29.01.2020

The minutes of meeting was circulated vide letter No. SGM (PS)-PI-15/2019/545⁽⁴⁹⁾ dated 18.02.2020 to all the members and also uploaded in the SLDC website. Members may offer their comments. If there are no comments, the minutes of the meeting may please be confirmed.

PART A

(List of items to be discussed for which the details are given in the subsequent parts)

- B : Grid Performance for the month of January'2020
- C.1: Review of implementation of PSDF approved projects of Eastern Region.
- C.2: Implementation of Automatic Generation Control in Eastern Region--ERLDC
- C.3: Severe Fluctuation in Voltage and Power in Jeypore -Gajuwaka Area (HVDC pole 1 tripped) observed on 31 Jan and 4th and 5th Feb 2020.
- C.4: Implementation of Automatic Demand Management Scheme.
- C.5: Implementation of SPS to avoid over drawal from Jamshedpur (DVC) S/s
- C.6: Report of expert group to review India Electricity Grid Code (IEGC)--ERLDC
- C.7: Training on "Safe and Secure Power System Operation"
- C.8: Updated Black Start and Restoration Procedure of Eastern Region – ERLDC
- C.9: Status of Islanding Scheme of IBTPS
- C.10: 220 kV Inter-connecting lines of OPTCL with 400/220 kV Bolangir (PG), Keonjhar & Pandiabil S/s
- C.11: Update on status of telemetry
- C.12: Mock Black start exercises in Eastern Region
- C.13: Monitoring of Next Six-Month New Element Integration in OCC and Its Update on Monthly Basis --ERLDC
- C.14: Submission of Thermal Loading of Transmission line and associated terminal equipment by ISTS licensee
- C.15: Preparation of crisis management plan for Cyber Security in Power Sector in line with CERT-IN.
- D.1: Non-compliance of drawal schedule by DISCOMs
- D.2: Compliance of CEA Regulations for Grid Connectivity of Renewable Energy Sources.
- D.3: Data communication from newly commissioned RE sources connected at 132 kV- SLDC
- D.4: Despatch Scheduling for RE Generation.
- D.5: Furnishing of generation data of RES Plants-regarding.
- D.6: Implementation of Automatic Meter Reading for OPTCL-Discom interface points.
- E.1: Commissioning status of New Transmission elements.
- E.2: Major Events in the month of January'20
- E.3: Important grid incidences during the month of January'20.
- E.4: Outage of major transmission Elements during the month January'20. (above 10 hrs).
- E.5: Prolonged outage of Transmission elements
- E.6: Review of Outage Program of State Generators for the month of February'20
- E.7: Generation Program for the month of February'20.
- E.8: Anticipated power generation and demand for the month of February'20.
- F.1: Date and Venue of the next (143nd) PSOC meeting.

PART B: GRID PERFORMANCE

B. Review of Grid Performance for the month of January'20.

A. Frequency:

Hourly frequency variation for the month of January'20.

Month	% of time frequency remained					Average
	<49.00	49.00-49.70	49.70-49.90	49.90-50.05	>50.05	
Nov'19	0.00	0.01	3.59	67.77	28.63	50.00
Dec'19	0.00	0.02	5.61	64.30	30.07	50.00
Jan'20	0.00	0.01	6.10	73.28	20.62	49.99

Maximum & Minimum frequency during the month of Dec'19 & Jan'20.

Month	Freq (Hz)	Date	Time
Dec'19	Maximum – 50.18	16.12.19	03:00 Hrs
	Minimum – 49.74	09.12.19	14:15 Hrs
Jan'20	Maximum – 50.14	11.01.20	10:45 Hrs
	Minimum – 49.73	06.01.20	14:15 Hrs

B. Grid Demand up to the month of January'20

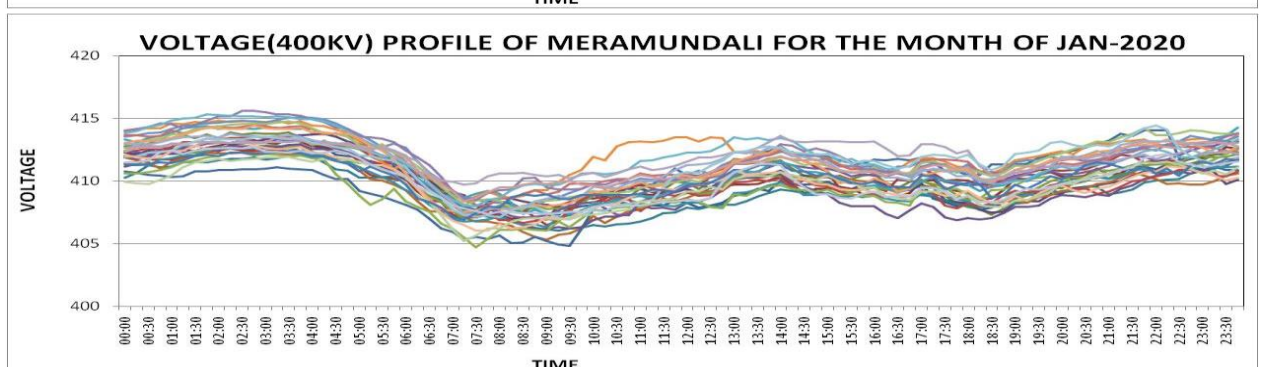
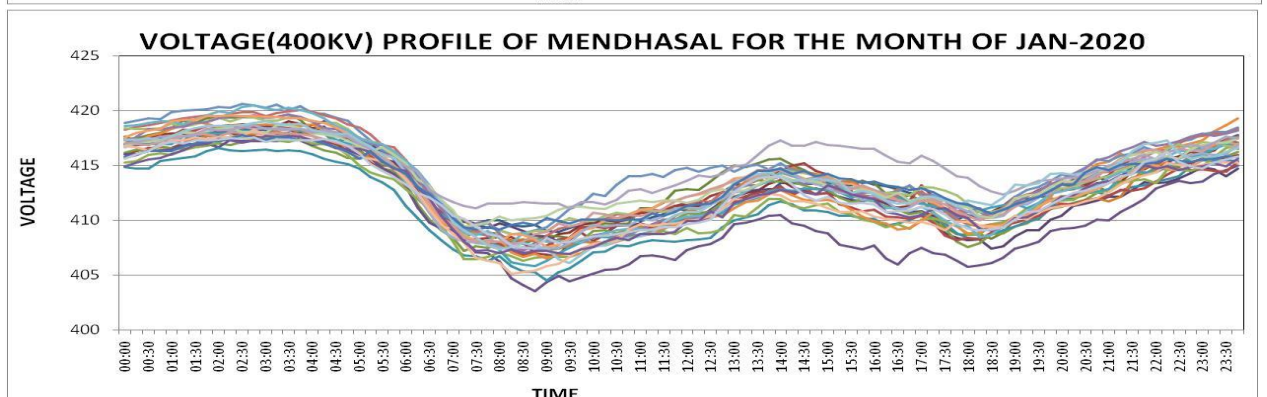
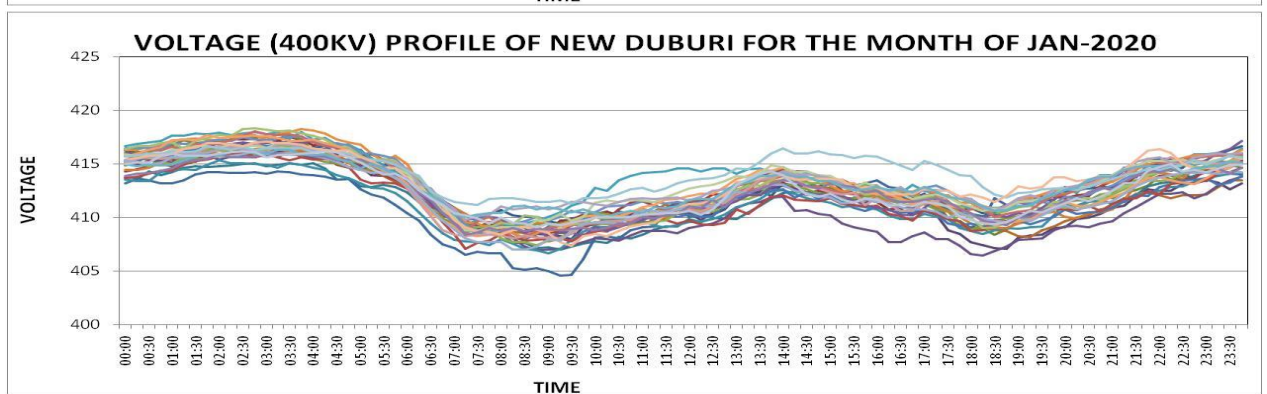
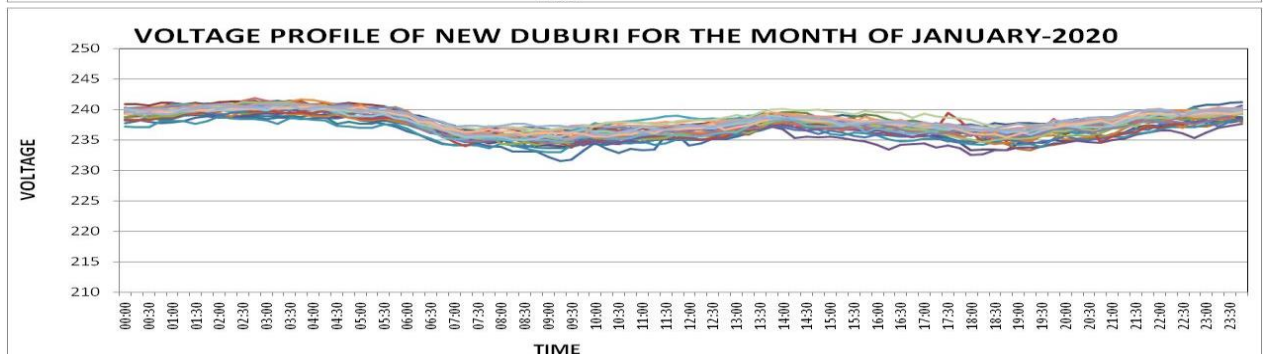
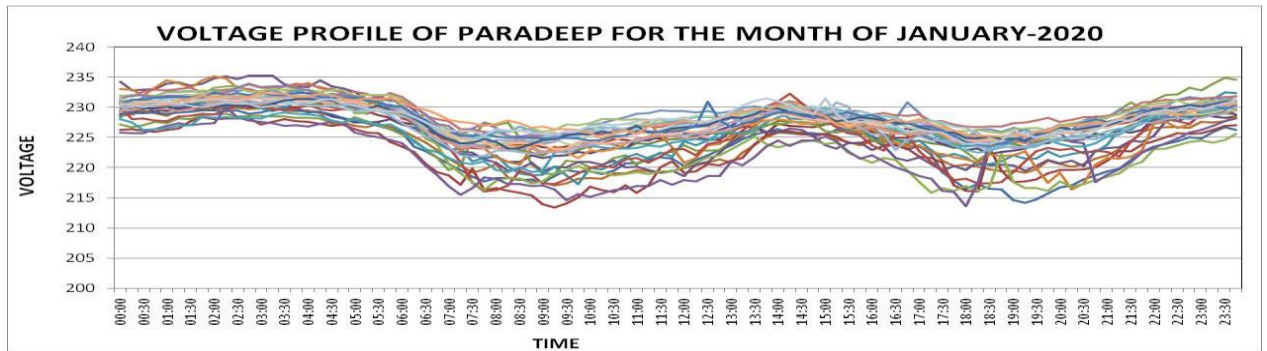
Month	Max. Consumption		Demand		Maximum Demand			Minimum Demand		
	MU	Date	MU	Avg. (MW)	MW	Date	Time	MW	Date	Time
Apr'19	113.14	05.04.19	2786	3869	5151	04.04.19	20:00	2689	20.04.19	05:00
May'19	102.99	19.05.19	2638	3545	4635	18.05.19	24:00	1720	03.05.19	18:00
June'19	105.24	11.06.19	2653	3684	4790	11.06.19	23:00	2556	13.06.19	06:00
July'19	106.80	15.07.19	2744	3688	4899	15.07.19	21:00	2640	02.07.19	04:00
Aug'19	105.41	21.08.19	2924	3930	4901	16.08.19	21:00	3161	08.08.19	05:00
Sept'19	107.91	19.09.19	2780	3862	4969	18.09.19	20:00	2982	30.09.19	05:00
Oct'19	89.89	12.10.19	2519	3386	4385	20.10.19	19:00	2430	25.10.19	03:00
Nov'19	83.34	02.11.19	2166	3008	4086	02.11.19	19:00	2020	09.11.19	03:00
Dec'19	84.73	02.12.19	2232	3000	4206	02.12.19	19:00	2110	28.12.19	04:00
Jan'20	71.14	29.01.20	2073	2787	3619	25.01.20	19:00	1936	04.01.20	03:00
Jan'19	83.50	26.01.19	2303	3095	4199	29.01.19	20:00	2246	02.01.19	03:00

C. Voltage Profile of 220 kV Buses in OPTCL system for the month of: January'20

220KV BUS VOLTAGES						
SUBSTATION	MAX VOLTAGE (KV)	DATE	TIME	MIN VOLTAGE (KV)	DATE	TIME
Atri	237.12	17-01-2020	02:30	224.59	07-01-2020	08:30
Balasore	234.87	16-01-2020	01:00	223.20	10-01-2020	18:00
Barkote	232.21	22-01-2020	02:30	226.67	28-01-2020	07:45
Bargarh	229.79	22-01-2020	00:00	218.53	16-01-2020	18:15
Bhadrak	232.61	01-01-2020	03:15	219.39	10-01-2020	18:00
Bhanjanagar	239.95	17-01-2020	02:30	227.01	08-01-2020	09:15
Bidanasi	238.27	01-01-2020	04:15	226.90	16-01-2020	09:30
Bolangir	235.56	22-01-2020	16:30	219.45	31-01-2020	15:00
Budhipadar	232.61	12-01-2020	04:30	227.19	28-01-2020	07:30
Chandaka	236.66	17-01-2020	02:30	222.34	10-01-2020	08:45
Cuttack	237.58	01-01-2020	04:15	226.15	16-01-2020	09:30
Duburi Old	233.36	20-01-2020	02:45	223.38	07-01-2020	09:15
Duburi New	241.91	20-01-2020	02:45	231.52	07-01-2020	09:15
Javanagar	240.47	21-01-2020	03:30	232.21	15-01-2020	08:15
Joda	237.23	09-01-2020	03:00	227.71	11-01-2020	18:15
Katapalli	228.63	03-01-2020	03:30	220.84	06-01-2020	09:15
Lapanga	233.31	12-01-2020	04:00	227.88	28-01-2020	07:30
Laxmipur	240.29	21-01-2020	03:30	230.88	10-01-2020	08:00
Mendhasal	239.66	17-01-2020	02:30	226.21	11-01-2020	09:00
Meramundali	229.79	22-01-2020	02:45	221.41	10-01-2020	18:15
Narendrapur	239.02	17-01-2020	02:30	219.05	15-01-2020	08:30
Navagarh	238.97	17-01-2020	02:30	226.13	10-01-2020	08:45
Paradeep	235.21	09-01-2020	02:45	213.39	07-01-2020	09:15
Tarkera	225.46	12-01-2020	14:00	219.34	04-01-2020	08:30
Theruvalli	239.83	17-01-2020	01:45	229.50	10-01-2020	08:00
Rengali	229.32	17-01-2020	03:15	224.53	04-01-2020	08:30

The maximum Voltage of **241.91 kV** occurred at **Duburi New 220 kV bus.**, while **Paradeep 220 kV bus** has experienced the minimum Voltage of **213.39 kV**. The 220 kV Voltage profile of Paradeep New Duburi and 400 kV Voltage profile of Mendhasal, Meramundali and New Duburi bus during the month of **Jan'2020** are indicated in System performance presentation.

Members may discuss.



D. Loading of 220/ 132 kV Auto at 220 kV S/Ss in OPTCL system for the month of Jan– 2020.

AUTO TRANSFORMER LOADING FOR THE MONTH OF JANUARY'2020

Name of the 220 kV Sub-Station (Feeding Sub-stations/Feeders)	Capacity MVA	Drawal details						REMARKS
		Maximum			Minimum			
		MW	Day	Time	MW	Day	Time	
ATRI {Banki, Khurda, Chandpur & Argul}	2x160	28.40	16th Jan 2020	08:45	0.04	1st Jan 2020	23:45	
		28.48	8th Jan 2020	08:15	0.04	1st Jan 2020	23:45	
ASKA NEW	2x160	38.08	15th Jan 2020	08:45	0.60	29th Jan 2020	12:30	
		37.76	15th Jan 2020	08:30	0.60	29th Jan 2020	12:30	
BALASORE 220/132 KV { Balasore, Birla Tyre(I), Ispat Alloy(I), Jaleswar, Jaleswar(T)}	3x160	83.40	21st Jan 2020	18:00	30.36	10th Jan 2020	11:45	
		66.92	25th Jan 2020	18:45	30.32	10th Jan 2020	11:45	
		87.60	21st Jan 2020	17:00	31.80	10th Jan 2020	10:45	
BARGARH 220/132 kV	1x100	19.40	6th Jan 2020	17:45	0.32	29th Jan 2020	12:00	
	1x160	18.56	7th Jan 2020	16:45	0.08	9th Jan 2020	09:45	
BHADRAK 220/132 KV {Bargarh, Ghensh}	1x100	34.48	11th Jan 2020	19:15	6.56	31st Jan 2020	00:00	
	1x160	61.52	11th Jan 2020	19:00	12.32	31st Jan 2020	00:00	
	1x160	61.68	11th Jan 2020	19:15	12.36	31st Jan 2020	00:00	
BHANJANAGAR 220/132 KV { Bhanjanagar, Aska, Phulbani,	1x160	76.04	8th Jan 2020	08:30	10.04	16th Jan 2020	02:00	
	1x160	66.84	8th Jan 2020	08:30	8.44	7th Jan 2020	17:45	
BIDANASI 220/132 KV {Bidanasi, Khurda }	1x100	UNDER SHUT DOWN						
	1x100	25.92	16th Jan 2020	10:15	0.04	1st Jan 2020	07:30	
	1x160	36.92	16th Jan 2020	10:15	0.04	1st Jan 2020	09:30	
BOLANGIR (SADAIPALLI) 220/132 KV	2x160	131.88	28th Jan 2020	18:15	0.44	16th Jan 2020	11:45	
		138.76	28th Jan 2020	18:15	0.56	16th Jan 2020	11:45	
BUDHIPADAR 220/132 KV { Jharsuguda, Jharsuguda Tr,	2x160	98.68	17th Jan 2020	18:15	42.80	29th Jan 2020	12:30	
		82.56	28th Jan 2020	18:00	42.56	29th Jan 2020	12:30	
CHANDAKA 220/132 KV { Chandaka, Bhubaneswar, Nimapada, Ransinghpur, Puri,Kesura, Kaipadar Tr. }	1x100	60.92	6th Jan 2020	18:00	17.32	2nd Jan 2020	02:15	
	1x160	105.24	6th Jan 2020	18:00	30.12	2nd Jan 2020	02:30	
	1x100	65.68	6th Jan 2020	18:00	18.64	2nd Jan 2020	02:30	
	1x160	91.88	13th Jan 2020	17:45	30.20	1st Jan 2020	03:30	
CUTTACK	1x160	63.96	4th Jan 2020	12:15	10.16	3rd Jan 2020	16:15	
	1x100	38.68	4th Jan 2020	12:15	6.20	4th Jan 2020	04:15	
DUBURI 220/132 KV {Duburi, Bamnipal(I), BRPL, MESCO, Jajpur Road, Kalarangi, Jajpur Town}	1x160	90.80	21st Jan 2020	10:30	0.20	3rd Jan 2020	13:15	
	1x100	57.92	21st Jan 2020	10:30	0.04	7th Jan 2020	15:45	
	1x100	55.20	20th Jan 2020	18:00	0.08	3rd Jan 2020	12:45	
JAYANAGAR 220/132 KV. [Damanjodi(NALCO), Traction S/Ss,	1x160	56.52	28th Jan 2020	07:15	1.28	17th Jan 2020	11:45	
	1x160	56.84	28th Jan 2020	07:15	2.20	5th Jan 2020	13:00	
JODA 220/132 KV { Joda,Tensa, FAP(I), Bolani(I), Nalda Tr.,Polasponga, *Rairangpur, Bhalulata	3x100	63.76	6th Jan 2020	20:00	30.36	3rd Jan 2020	04:00	*** - Alternate P/S from Kuche.
	UNDER SHUT DOWN							
		65.92	6th Jan 2020	20:00	31.44	3rd Jan 2020	04:00	
KATAPALI 220/132 KV {Chipilima,Bargarh, ACC,Sonepur & Katapali area load.}	1x100	27.80	31st Jan 2020	00:00	0.04	2nd Jan 2020	21:45	Supported by Burla & Chipilima power.
	1x100	27.72	31st Jan 2020	00:00	0.04	1st Jan 2020	04:00	
	1x160	41.80	31st Jan 2020	00:00	0.04	2nd Jan 2020	10:00	
LAPANGA {Kuchinda, Aryan Viraj, Shyam	2x160	87.12	28th Jan 2020	18:00	25.84	9th Jan 2020	11:15	
		73.80	27th Jan 2020	16:30	25.80	9th Jan 2020	11:15	
MERAMUNDALI 220/132 KV {Meramundali Traction, Dhenkanal, Navchrome(I), Hind Metal, Aarti,BRG}	3x100	29.68	16th Jan 2020	18:15	1.44	26th Jan 2020	03:00	
		32.88	31st Jan 2020	00:00	1.52	26th Jan 2020	03:00	
		32.60	31st Jan 2020	00:00	0.72	4th Jan 2020	02:45	
Mendhasal { Part area load of Khurda S/S}	2x100	42.60	10th Jan 2020	04:15	2.40	22nd Jan 2020	04:30	
		45.00	10th Jan 2020	04:15	2.40	22nd Jan 2020	04:30	
NARENDRAPUR 220/132KV { Narendrapur, NarendrapurTr, Berhampur, Chhatrapur, Ganjam,	2x160	107.52	29th Jan 2020	16:30	35.84	5th Jan 2020	02:45	
		100.16	7th Jan 2020	08:00	18.52	4th Jan 2020	15:45	
	1x100	61.92	29th Jan 2020	16:30	20.08	5th Jan 2020	02:45	
PARDEEP 220/132 KV { Paradeep, Kendrapada, Pattamundai, Chandikhol, Cuttack, Jagatsinghpur,	1x100	50.04	17th Jan 2020	19:45	0.08	17th Jan 2020	16:45	
	1x160	82.44	17th Jan 2020	19:45	12.28	22nd Jan 2020	15:15	
	1x160	63.48	24th Jan 2020	18:15	0.28	8th Jan 2020	08:30	
TARKERA 220/132 KV [Rourkela, Rourkela Tr.,RSP(I), Chhend , Adhunik Metal, Rajgangpur, OCL(I), Rajgangpur Tr.]	4x100	68.20	24th Jan 2020	10:45	0.12	8th Jan 2020	10:00	
		71.48	24th Jan 2020	10:45	14.20	10th Jan 2020	16:45	
		67.12	24th Jan 2020	10:45	3.00	29th Jan 2020	15:00	
		67.56	24th Jan 2020	09:15	0.04	8th Jan 2020	09:45	
THERUVALLI 220/132 KV. {Theruvalli, IMFAL(I), JK(I), Junagarh, Kesinga,Powmex(I), Rayagada, }	2x100	43.68	10th Jan 2020	08:00	6.64	11th Jan 2020	13:00	Rayagada & Paralakhemundi can be fed from Machhkund system.
		46.84	31st Jan 2020	00:00	6.40	11th Jan 2020	13:00	
	1x160	72.44	31st Jan 2020	00:00	9.64	11th Jan 2020	13:15	
TTPS 220/132 KV { Chainpal, FCI (I), Angul, MCL	1x160	82.12	18th Jan 2020	13:30	0.00	2nd Jan 2020	07:30	
	1x160	82.12	18th Jan 2020	13:30	0.00	2nd Jan 2020	07:30	
SAMANGARA { Puri, Nimapara & Konark}	2x160							

ICT LOADING FOR THE MONTH OF JANUARY' 2020

Name of the 400 kV Sub-Station	Capacity MVA	Drawal details						REMARKS
		Maximum			Minimum			
		MW	Day	Time	MW	Day	Time	
MERAMUNDALI	2x315	114.80	1st Jan 2020	21:15	0.40	5th Jan 2020	15:30	
		115.60	1st Jan 2020	21:15	0.40	2nd Jan 2020	12:15	
MENDHASAL	2x315	190.00	15th Jan 2020	09:30	56.00	28th Jan 2020	12:15	
		190.80	15th Jan 2020	09:45	11.60	21st Jan 2020	15:30	
		118.40	31st Jan 2020	00:00	56.00	28th Jan 2020	12:15	
DUBURI(N)	2x315	242.80	15th Jan 2020	19:30	63.60	31st Jan 2020	00:00	
		245.60	20th Jan 2020	19:15	63.20	31st Jan 2020	00:00	
LAPANGA	2x315	167.20	31st Jan 2020	00:00	14.40	3rd Jan 2020	00:15	
		166.40	31st Jan 2020	00:00	14.00	3rd Jan 2020	00:15	

E. DISCOM Drawal up to the month of January'20

Name of DISCOM	Month	Approved Energy Drawal Prorated for the month (MU)	Schedule Schedule Energy (MU)	Actual Energy Drawal (MU)	Open Access Import Schedule (MU)	Net Energy Drawal (MU)	Overdra w (MU)
		1	2	3	4	5=(3-4)	6=(5-2)
CESU	Apr'19	798.00	760.542	857.404	18.345	839.059	78.517
	May'19	824.97	664.438	689.035	16.166	672.869	8.431
	June'19	798.00	758.651	793.853	17.431	776.422	17.771
	July'19	824.97	778.505	798.994	15.847	783.147	4.642
	Aug'19	824.97	745.852	785.057	14.196	770.861	25.009
	Sept'19	798.00	766.486	755.33	15.336	739.994	-26.492
	Oct'19	824.97	739.392	740.459	16.154	724.305	-15.087
	Nov'19	798.00	595.388	610.682	17.688	592.994	-2.394
	Dec'19	824.97	546.908	559.218	13.749	545.469	-1.439
	Jan'20	824.97	530.513	558.175	17.832	540.343	9.83
WESCO	Apr'19	635.00	649.188	856.374	149.999	706.375	57.187
	May'19	656.42	703.036	841.28	100.32	740.96	37.924
	June'19	635.00	656.64	789.792	110.175	679.617	22.977
	July'19	656.42	670.083	835.876	143.639	692.237	22.154
	Aug'19	656.42	637.41	1043.79	423.111	620.682	-16.728
	Sept'19	635.00	650.296	908.15	281.184	626.966	-23.33
	Oct'19	656.42	605.866	678.503	71.157	607.346	1.48
	Nov'19	635.00	564.911	695.851	165.109	530.742	-34.169
	Dec'19	656.42	569.338	796.044	224.353	571.691	2.353
	Jan'20	656.42	591.278	653.409	60.524	592.885	1.607
NESCO	Apr'19	517.00	478.905	600.692	99.608	501.084	22.179
	May'19	534.45	508.934	629.852	89.858	539.994	31.06
	June'19	517.00	490.244	607.403	105.15	502.253	12.009
	July'19	534.45	532.112	660.208	131.831	528.377	-3.735
	Aug'19	534.45	493.554	627.779	128.157	499.622	6.068
	Sept'19	517.00	451.669	557.042	99.737	457.305	5.636
	Oct'19	534.45	446.652	556.344	105.563	450.781	4.129
	Nov'19	517.00	372.351	482.904	103.582	379.322	6.971
	Dec'19	534.45	367.461	512.244	123.942	388.302	20.841
	Jan'20	534.45	390.586	514.708	119.071	395.637	5.051
SOUTHCO	Apr'19	331.00	303.576	334.361	0	334.361	30.785
	May'19	342.19	320.055	336.003	0	336.003	15.048
	June'19	331.00	318.393	324.819	0.116	324.703	6.31

July'19	342.19	315.891	305.83	0.061	305.769	-10.122
Aug'19	342.19	291.711	296.609	0	296.609	4.898
Sept'19	331.00	298.482	290.17	0.007	290.163	-8.319
Oct'19	342.19	285.153	283.453	0.263	283.19	-1.963
Nov'19	331.00	262.522	254.704	0	254.704	-7.818
Dec'19	342.19	243.367	251.773	0	251.773	8.406
Jan'20	342.19	258.017	260.682	0.168	260.514	2.497

The figures are as per EBC data. Energy drawal by SOUTHCO are excluding of energy consumed by NALCO at Damanjodi and IMFA at Theruvali.

Members may please discuss.

F. Energy Generation / Import up to the month of January'20

Figures in MU

Month	Thermal (TTPS+IbTPS)	OHPC & MKD	CGP Support	IPP Inj.	RE	ISGS	Total
April'19	588.681	538.473	308.480	263.019	29.852	1057.035	2785.540
May'19	608.185	571.561	290.845	203.850	46.247	916.949	2637.637
June'19	581.856	414.962	329.321	212.683	47.362	1066.419	2652.603
July'19	566.902	407.505	363.839	198.433	46.030	1171.210	2753.919
Aug'19	359.551	836.840	345.534	56.723	46.535	1278.578	2923.761
Sept'19	828.709	808.759	328.938	75.013	44.608	694.453	2780.479
Oct'19	931.846	815.124	201.462	170.221	43.395	357.406	2519.453
Nov'19	1002.867	462.376	284.32	174.39	39.004	202.254	2165.561
Dec'19	871.252	388.621	392.156	173.107	40.443	366.245	2231.824
Jan'20	991.802	431.027	272.108	190.362	27.602	160.55	2073.451
Total	7331.65	5675.25	3117	1717.8	411.075	7271.1	25524.2

G. Drawal of Machhakund Power

The drawal of Machhakund power up to the month of **January'20** are as detailed:

Month	Total Generation		Odisha Drawl		AP Drawl	
	MU	Avg (MW)	MU	Avg (MW)	MU	Avg (MW)
Apr'19	53.168	73.84	24.896	34.58	26.401	36.67
May'19	60.577	81.42	26.811	36.04	31.821	42.77
June'19	52.203	72.50	22.395	31.10	30.840	42.84
July'19	59.779	80.35	26.579	35.73	31.116	41.82
Aug'19	53.318	71.66	24.773	33.30	27.139	36.48
Sept'19	52.348	72.71	23.869	33.15	26.276	36.494
Oct'19	51.532	69.26	23.229	31.22	25.936	34.860
Nov'19	55.359	76.89	26.311	36.54	26.995	37.493
Dec'19	60.914	81.87	28.374	38.14	30.091	40.44
Jan'20	56.593	76.06	27.158	36.50	27.065	36.38
Total	555.791		254.395		283.680	

In the 136th PSOC meeting Southco stated that Dasmantpur feeder in expected to be charged today i.e. on 21.08.2019.

Sr.GM (O&M), Zone –I suggested to explore the following link lines for providing adequate matching load in Machhakund system.

- Connecting Patangi S/S or Proposed Lamtaput S/S with Podagada S/S through 132 kV link.
- Providing Sunabeda S/S area load in Machhakund system
- Modification of Jayanagar S/S to accommodate Jayanagar load

In the 137th PSOC meeting, SOUTHCO stated that 33 kV Dasmantpur feeder did not stand after charging. Insulators are being changed by the contractor. Sr. GM (Const) stated that 132 kV

Patangi-Podagada line is under construction and expected by March'2020. He also suggested to utilize 132 kV NALCO-Sunabeda line to feed Sunabeda area load from Machhakund system by bus splitting.

In the 139th PSOC meeting SOUTHCO stated that insulator changing of Dasantpur feeder is under progress. It was suggested that GRIDCO may convene a meeting with PMU for early restoration of the feeder, so that, more matching load can be provided in Machhakund system. SLDC may write to PMU to ascertain the status of feeders at Podagada S/S.

In the 140th PSOC meeting SOUTHCO stated that about 10 Nos of span have left for insulator changing. CGM (O&M) suggested to connect 33kV Medical feeder may with Podagada S/S for increase load at Machhakund system. Patangi –Podagada 132 kV connectivity is expected by March'19, by which, more load can be kept in Machhakund system. Further Rly. is requesting to change the connectivity of Rayagada Traction feeder from Rayagada to Theruvali S/S. GRIDCO has agreed to convene a meeting with PMU to discuss the issue.

In the 141th PSOC meeting GRIDCO has agreed to convene a meeting with PMU during the month of February'20 to discuss the issue. CGM (O&M) suggested to Kakariguma feeder may be added to Podagada S/S.

GRIDCO / O&M/SLDC/SOUTHCO may deliberate.

H. Under Frequency Relay operation in OPTCL System during the month of January'20.

Since, the frequency had never gone beyond the lowest setting of UFR, there was no UF Relay operation occurred during the month of **January'20**.

Members may note

I. Status of Open Access applications up to the month of January'2020

The status of different types of Open Access applications received and disposed by SLDC is as tabled.

Sl. No	Month	No of Applications received					No of Applications Disposed					No of App. Rejected	MU
		Intra - State	Inter-State		Total	Intra - State	Inter-State		Total				
			Bilateral				PX	Bilateral		PX			
			ST	MT/LT				ST			MT/LT		
1	April'19	48	100	0	24	172	48	100	0	24	172	0	522.98
2	May'19	21	92	0	29	142	21	92	0	29	142	0	487.30
3	June'19	49	106	0	32	187	49	106	0	32	187	0	641.01
4	July'19	94	60	0	28	182	94	60	0	28	182	0	726.36
5	Aug'19	114	132	0	38	284	114	132	0	38	284	4	904.48
6	Sept'19	66	122	0	58	246	66	122	0	58	246	1	576.64
7	Oct'19	42	43	0	34	119	42	43	0	34	119	0	360.33
8	Nov'19	66	50	0	35	151	66	50	0	35	151	0	593.07
9	Dec'19	53	59	0	29	141	53	59	0	29	141	0	661.84
10	Jan'20	86	15	0	28	129	86	15	0	28	129	0	603.07
	Total	639	779	0	335	1753	639	779	0	335	1753	5	6077.08

PART C – Issues discussed in the 166th OCC meeting of ERPC on 20.02.2020

C.1: Review of implementation of PSDF approved projects of Eastern Region.

NLDC (POSOCO) being the Nodal Agency for PSDF schemes, is carrying out PSDF Secretariat function under directions of MoP. Recently NLDC is directed by MoP to disburse the PSDF sanctioned funds as early as possible as its non-utilization is being viewed seriously by MoP on various fora.

All the constituents are requested to furnish/update the status of their respective project in every OCC and also requested to submit requisition for disbursement to NLDC at the earliest by 1st February 2020, so that amount may be released by 31st March 2020.

The latest status as updated by OPTCL / OHPC is as given below:

Sl No	Name of Constituent	Name of Project	Date of approval from PSDF	Target Date of Completion	PSDF grant Approved (in Rs.)	Amount Drawn till date (in Rs.)	Status as updated in 129 th meeting
4	OPTCL	Renovation & Up-gradation of protection and control systems of Sub-stations in the State of Odisha in order to rectify protection related deficiencies.	11.05.15	31.03.20	162.5 Cr. Total expenditure may not exceed Rs. 68 Cr.	38.09 Cr. Received Rs. 8.00 Cr on 28.03.19	<i>Work almost completed.</i>
7		Implementation of OPGW based reliable communication at 132kV and above substations	15.11.2017		51.22 Cr	7.60 Cr received as 10 % DPR. Claimed for 20 %.	750 KMs OPGW received. Work started Inspection for 1000 Kms under process.
13	OHPC	Renovation & up-gradation of protection & control system of 4 nos. OHPC sub-stations		U.Kolab-March 19 Balimela-Feb 2019 U.Indravati-Jan 19 Burla-Nov18 Chiplima Dec 2018	22.35 Cr.	4.066 Cr	<i>Placed work order for all Stn.s for Rs. 17.00 Lacs. Chipilima work completed.</i>
Projects under process of approval:							
	OPTCL	Installation of 125 MVAR Bus Reactor along with construction of associated bay each at 400kV Grid S/S of Mendhasal, Meramundali & New Duburi for VAR control & stabilisation of system voltage	27-07-18		31.94 Cr Estd. Cost. Approved amount 30.26 Cr. Grant amount 27.23 Cr.	Rs.2.72 Cr received as 10% of DPR. Retendering under process.	Agreement sent to NLDC for signature. The L-1 bidding process is higher than the estimated cost..Expected by end of Dec'19.
Projects recently submitted:							
	OPTCL	Implementation of Automatic Demand Management System (ADMS) in SLDC, Odisha	22-12-17	Date of submission	3.26 Cr Estd cost. 2.93 Cr recommended by Appraisal committee.		CERC approval received. Tendering will be done by Jan.'2020
	OPTCL	Protection up gradation and installation of SAS for seven numbers of 220/132/33kV Grid substations (Balasore, Bidanasi, Budhipadar, Katapalli, Narendrapur, New-Bolangir & Paradeep).	12.03.2018	Date of submission	41.1 Cr Estd cost	10% of DPR to be asked.	Project approved. Addendum to the tender to be made. Agreement will be sent to NLDC after signature by Govt.

CGM (Const)/CGM (O&M) / OHPC may deliberate

C.2: Implementation of Automatic Generation Control in Eastern Region--ERLDC

In compliance to CERC's direction in order dated 06/12/2017 in petition no 79/RC/2017, AGC was commissioned in NTPC Barh on 01st August 2019 and operationalized since 23rd August, 2019.

Vide order dated 28th August 2019, CERC in Petition No.: 319/RC/2018 directed that all the ISGS stations whose tariff is determined or adopted by CERC shall be AGC-enabled and the ancillary services including secondary control through AGC be implemented as per the following direction:

I. All thermal ISGS stations with installed capacity of 200 MW and above and all hydro stations having capacity exceeding 25 MW excluding the Run-of-River Hydro Projects irrespective of size of the generating station and whose tariff is determined or adopted by CERC are directed to install equipment at the unit control rooms for transferring the required data for AGC as per the requirement to be notified by NLDC. NLDC shall notify the said requirements within one month of this order.

II. All such ISGS stations whose tariff is determined or adopted by CERC shall have communication from the nearest wide band node to the RTU in the unit control room.

XXXXXXXXXX

IX. All new thermal ISGS stations with installed capacity of 200 MW and above and hydro stations having capacity exceeding 25 MW excluding the Run-of-River Hydro Projects irrespective of size of the generating station and whose tariff is determined or adopted by CERC shall mandatorily have the capability to provide AGC support.

In the 162nd OCC, it was clarified that AGC signal for intra-state generating stations would be generated by the concerned SLDC and the relevant communication path is to be established between SLDC to plant. For ISGS stations, the AGC signal would be sent from NLDC.

All concerned plants may please ensure taking necessary action for arranging the communication (through redundant and alternate paths) from the existing nearest wideband communication node to their unit control rooms through two fibre optic cables, in coordination with CTU. It may please be noted that all the ISGS stations whose tariff is determined by or adopted by CERC should be AGC-enabled before 28th February 2020, as per order of CERC.

OCC suggested that even though the total capacity is tied up with GRIDCO, depending the area control error during low/high frequency scenario, the generation can be increased / decreased up to 5% by sending AGC signal from SLDC. Member Secretary advised OPGC to submit their action plan within 7 days for implementation of AGC. Further OPGC may depute their officers to visit Barh NTPC station to study the mechanism they have adopted for AGC. SLDC may interact with NLDC in this regard.

Summary status of implementation of AGC

Unit#3 of OPGC	SLDC, Odisha and OPGC agreed to submit their plan by 1 st week of Nov19
----------------	--

In 42nd TCC, DVC intimated that AGC shall be implemented in unit 7 and 8 of Mejia as per the given schedule by 31st July 2020.

Odisha informed that SLDC and OPGC will sit together and finalise the scheme.

WBPDCCL informed that they have already collected offer from Siemens for implementation of AGC and they are awaiting the concurrence from SLDC.

SLDC, WB informed that they are not in a position to implement AGC unless a clear direction is given by WBERC. Further, implementation of intra state DSM is a prerequisite for implementation of AGC in the state.

It was decided to request CERC to include this as an issue in the Agenda for discussion in the meeting of Forum of Regulators.

In the 140th PSOC meeting, it was decided to convene the meeting by SLDC with OPGC & O&M after finalization of the commercial issue.

As decided in the 141th PSOC meeting a meeting was convened by SLDC on dated 18.02.2020 between OPGC, GRIDCO. A committee was constituted with representatives of OPGC, SLDC and GRIDCO. The members will visit Barh NTPC station to study the mechanism adopted for AGC and interact with NLDC in this regard.

SLDC/ OPGC may deliberate

C.3: Severe Fluctuation in Voltage and Power in Jeypore -Gajuwaka Area (HVDC pole 1 tripped) observed on 31 Jan and 4th and 5th Feb 2020

Three events of severe nature have occurred near Jeypore and Gajuwaka Area where severe hunting has been observed in Power and Voltage and HVDC Gajuwaka Pole 1 has tripped. The timing of the event is as follows: 1. 14:46hrs to 14:51hrs on 31-01-2020 2. 14:34hrs to 14:36hrs on 04-02-2020 3. 08:34hrs to 08:38hrs on 05-02-2020

An email was sent from ERLDC on 6th-Feb 2020 showing severity of the oscillation and seeking following information:

Orissa SLDC/OPTCL/OHPC/OPGC to find out and Share (SLDC to coordinate) and NTPC Talcher:

1. Any Generator Control Malfunction (All Hydro/thermal near Jeypore/Indrawati areas for their excitation/governor control issues)
2. Any Transmission line where continuous auto-reclosure occurring due to transient fault (Arcing due to lower voltage kv line passing below)
3. Any other reason for such faults and fluctuation in Orissa network
4. Any CPPs/Loads providing such fluctuation in the system
5. Why No generators of Orissa has reported hunting to System Operator in such huge network fluctuation

SLDC may deliberate

C.4: Implementation of Automatic Demand Management Scheme

The latest status along with proposed logic as follows:

Sl. No	State /Utility	Logic for ADMS operation	Implementation status/target	Proposed logic (if different from under implementation logic)
1	Odisha	1. System Frequency < 49.9 Hz 2. Odisha over-drawl > 150 MW 3. DISCOM over-drawl > (40 MW)	10 Months Sent for PSDF approval	Logic 2 and 3 is AND or OR, in case it is AND then ADMS may not operate when DISCOMs are in schedule but GRIDCO is over drawing due to less generation at State embedded generators.

In the 138th PSOC meeting SLDC stated that technical sanction has been done and forwarded to CPC for tendering.

In 165th OCC ERLDC gave a presentation on the uniform logic. The proposed logic for ADMS operation is given below:

If frequency is less than 49.9 Hz for 3 minutes
and
Overdrawl/Under injection > 150 MW or 12 %

OCC advised all the states to go through the presentation and submit their comments to ERPC and ERLDC for finalization of ADMS logic.

In the 141th PSOC meeting SLDC stated that Tender will be floated by end of February'2020.

SLDC may deliberate.

C.5: Implementation of SPS to avoid over drawal from Jamshedpur (DVC) S/s

In 8th SSCM, OPTCL informed that they need power assistance of maximum 55 MW from 220kV Jamshedpur S/s, DVC to meet the load of JSPL during replacement work of the conductor of 220kV Joda-JSPL line.

DVC agreed to provide maximum 55 MW from 220kV Jamshedpur S/s during the conductor replacement work, however DVC requested to implement SPS to avoid over drawl from 220kV Jamshedpur S/s during any contingency in the system.

In 165th OCC, DVC requested to implement SPS to avoid over drawl from 220kV Jamshedpur S/s during any contingency in the system.

OCC advised OPTCL to give a requisition and other relevant details to DVC.

OCC decided to discuss the SPS in a separate meeting with all the concerned utilities

O&M may discuss

C.6: Report of expert group to review India Electricity Grid Code (IEGC)--ERLDC

The Commission vide office order dated 28.5.2019 constituted an Expert Group to review “Indian Electricity Grid Code and other related issues” under the Chairmanship of Shri Rakesh Nath, ExChairperson, CEA & Ex-Member (Tech) of APTEL with Shri A.S.Bakshi, Ex-Chairperson, CEA & Ex-Member, CERC, Shri Ravinder, Ex-Chairperson, CEA & ExChief (Engg.), CERC as Members and Shri S.C.Shrivastava, Chief (Engg.), CERC as Member, Convenor. The group co-opted Shri S.R.Narasimhan, Director (S.O), POSOCO and Shri Hemant Jain, Chief Engineer (G.M), CEA as Members of the Expert Group.

The Expert Group has finalized its recommendation as per comments received from various stake holder and several expert group meetings in the form of draft Indian Electricity Grid Code (IEGC), 2020, which is published in CERC website at the following link <http://cercind.gov.in/2020/reports/Final%20Report%20dated%2014.1.2020.pdf>

In 165th OCC, members requested Member Secretary, ERPC to conduct a workshop on the draft Indian Electricity Grid Code (IEGC), 2020 for better understanding.

As per the OCC decision, the workshop was conducted at ERPC on 13th February, 2020 wherein Shri S. R. Narasimhan, Director (SO), POSOCO gave a detailed presentation.

In the workshop, it was informed that all states may submit their comments on the draft Indian Electricity Grid Code (IEGC), 2020 for further discussion.

Members may discuss.

C.7: Training on “Safe and Secure Power System Operation”

As a part of Capacity Building initiative for the Power Sector engineers of the Eastern Region, a ‘5 days Training Programme’ on “Ensuring Safe and Secure Power System Operation” is being organized by ERPC in association with Asia Institute of Power Management (AIPM), a training arm of CESC Limited at Kolkata from 02.03.2020 to 06.03.2020 (5 days) under PSDF Project. This will be the 4th Training Module for the year 2019 – 20 and ERPC Secretariat had notified to all the Power Utilities of ER on 27.01.2020 seeking nomination for 1 to 2 engineers of each organisation since the batch size is limited to 35 nos. only. Except a few organisation of ER including Bhutan Authorities, the nominations from most of the organizations are still awaited.

The Constituents who are yet to nominate engineers (1 / 2 nos.) for the 4th Module of AIPM Training commencing from 02.03.2020 to 06.03.2020 may please send the nominations to ERPC Secretariat at mserpc-power@nic.in positively by 21.02.2020.

Members may send the nomination for training.

C.8: Updated Black Start and Restoration Procedure of Eastern Region – ERLDC

In compliance with clause 5.8 (a) and (b) of the present IEGC, The Restoration Procedure has to be developed and updated annually by RLDC in consultation with NLDC, all users, STU,SLDC,CTU, RPC Secretariat of the region.

Draft copy of “Black Start and Restoration Procedure” was circulated on 16th Jan 2020 for review and feedback from stake holder. All stake holder are requested to give comments by 27th Jan 2020.

So that the procedure can be finalized by 30th Jan 2020.

In line with decision taken during 165th OCC meeting “Black Start and Restoration Procedure” of Eastern Region was finalized and circulated to all concerned on 31st Jan 2020.

SLDC/ OHPC/ O&M may discuss

C.9: Status of Islanding Scheme of IBTPS

Islanding scheme of IBTPS was discussed and finalized in earlier OCC and PCC meeting, OPGC ensured that the islanding scheme will be in place within 6 months post finalization of scheme.

OPGC may update

C.10: 220 kV Inter-connecting lines of OPTCL with 400/220 kV Bolangir(PG), Keonjhar & Pandiabil S/s

PGCIL has already commissioned the 2 X 315MVA 400/220kV Bolangir S/s by LILoing of 400 kV Meramandali-Jeypore S/C line and 400/220 kV Keonjhar S/s with an objective of supplying power from ER grid to its adjoining areas in Odisha.

In 141th PSOC meeting the status has been updated as follows:

Sl.	Name of the transmission line	Completion schedule
1.	2 X 315MVA 400/220kV Bolangir S/s	
a.	LILo of one circuit of Sadeipalli-Kesinga 220 kV D/C line at Bolangir (PG) S/S.	Construction of 220 kV Sadeipali- Kesinga line has started. 220 kV Sadeipali-Bolangir (PG) portion of the line is expected by March’20.
2.	400/220 kV Keonjhar S/S.	
a.	Keonjhar (PG)-Keonjhar (220/33 kV) & 220 kV D/C line	220 kV S.C line and Keonjhar S/S (220/33 kV), 2x20 MVA charged on 31.12.2018. 2 nd ckt; charged on 03.08.2019.
b.	Keonjhar (PG)-Turumunga (220/132 kV) & 220 kV D/C Line.	By 2021. Order placed.
3.	400/220 kV Pandiabil Grid S/s	
a.	Pratapsasan(OPTCL)-Pandiabil (PG) 220 kV D/C	June’2020

C.GM (Cont) / CGM (Telecom) may update.

C.11: Update on status of telemetry

CERC vide order dated 28.02.2016 on Petition No. 007/SN/2014 directed NLDC and respective RLDCs to update the status of telemetry every month at their respective websites and take up the issue of persistent non-availability of data from Generating Stations/substations at RPC meetings for appropriate action. Major issues are given below:

xxxxxxx

Issues relating OPTCL Network:

Narsingpur data:

In the 132nd PSOC meeting CGM (Telecom) stated that survey work for Meramundali-Bhanjanagar line is under process. OPGW will be reached at site after completion of survey and preparation of drum schedule.

In the 134th meeting CGM (Telecom) stated that delivery of OPGW has already been started.

In the 135th PSOC meeting DGM (Telecom) stated that replacement of earth wire by OPGW in 220 kV Bhanjanagar-Meramundali is expected by December’2019

NALCO data: DGM (Telecom) stated that the vender list and rate will be provided to NALCO for placement of order by them.

In the 137th PSOC meeting, NALCO stated that the estimate has already been received from OPTCL (Telecom). Approval from higher authority in under process.

In the 139th PSOC meeting, NALCO stated that they need protection scheme to be incorporated in the estimate. PSOC advised NALCO to write Telecom wing of OPTCL for revise estimate.

In the 140th PSOC meeting, DGM (Telecom) stated that protection scheme has already been incorporated in the estimate. NALCO representative was not present in the meeting for deliberation.

In the 141th PSOC meeting, NALCO stated that the file is under process by their Finance wing.

Telecom / NALCO may deliberate the status

C.12: Mock Black start exercises in Eastern Region – ERLDC

Schedule and tentative date for conducting mock black start exercise in OHPC stations is as tabled.

Sl.	Name of Hydro Station	Schedule	Tentative Date	Schedule	Tentative Date
		Test-I		Test-II	
1	Upper Kolab	Last week of May-2019	Done on 19 th July19	Last week of January 2020	
3	Rengali	2nd week of June 2019	Done on June'19	Last week of November 2019	
4	U.Indravati	3rd week of June 2019	Done on June'19	2nd week of February 2020	
6	Balimela	3rd week of October 2019	Done on 17 th July19	1st week of March 2020	Done on 12.02.20
9	Burla	Last week of June 2019	Done on 20 th July' 2019	Last week of February 2020	Done on 11.02.20

SLDC / O&M/ OHPC may deliberate

C.13: Monitoring of Next Six-Month New Element Integration in OCC and Its Update on Monthly Basis --ERLDC

It has been observed that many elements are getting interconnected into the system and beforehand details are not available with the system operator resulting in difficulty in carrying our operational planning activity. In view of this, as a regular agenda all ISTS and ISGS/IPP to update the OCC regarding any new elements at 220 kV and above which will be integrated in next six month with the grid. For State Grid, SLDC will be submitting the details on behalf of its intrastate Generation and transmission system. The format is given below:

Transmission Elements	Agency/ Owner	Scheme (ERSS/ TBCB/ Standing Committee/State	Schedule Completion	Projected Month for Completion	Issue Being Faced

In previous several OCC, Transmission licensees and SLDCs are requested to submit RLDC/ RPC following details on monthly basis

- List of transmission element /generators of State and ISTS licensees synchronised in the last month.
- List of transmission element /generators expected to be synchronised during next month or in near future

Some SLDCs are submitting the list of intrastate and interstate line on regular basis, however transmission element /generators expected to be synchronised during next month or in near future is not submitted by any SLDC/Transmission licensee to RLDC/ RPC.

In 163rd OCC, OCC advised all the constituents, SLDCs and ISTS licensees to submit the details to erldcprotection@posoco.co.in as per the format.

List of upcoming Transmission Element is received from Bihar and Jharkhand.

In the 141th PSOC meeting, DGM (Const) stated that the information has already been submitted.

CGM (O&M) / C.G.M. (const.) may deliberate.

C.14: Submission of Thermal Loading of Transmission line and associated terminal equipment by ISTS licensee

Thermal Loading of Transmission line and associated terminal equipment is one of the most vital data which is utilized for Operation Purpose, calculation of ATC/TTC and various other studies. This information has to be submitted by the transmission utilities. However even after regular follow-up in past several OCC meetings, significant delay has been observed in submission. Status of submission of data up to first week of December 2019 is as follows:

Name of Utility	Whether End Equipment Rating Submitted or Not?
OPTCL	Submitted (Revised list given to OPTCL for submission)

O&M may update the status

C.15: Preparation of crisis management plan for Cyber Security in Power Sector in line with CERT-IN.

The activity of the preparation of Crisis Management Plan for countering the cyber-attacks and its implementation including the Mock Drills, audits etc. is being monitored by CEA regularly in line with crisis management plant of Ministry of Power. Power Utilities (including generation, transmission & distribution utilities) of eastern region are to furnish regularly the updated status to on the same to Chief Engineer, Distribution Planning & Development Division, CEA.

In 142nd OCC, ERLDC informed that, in line with Enquiry Committee Recommendation, cyber security audit is being conducted on regular basis for SCADA system installed at ERLDC and SLDC as well but cyber security audit for telecom infrastructure installed in Eastern Region is not being carried out.

OCC advised all the constituents to conduct the cyber security audit on telecom infrastructure installed in Eastern Region. It is further advised that compliance / mitigation of the points observed during the audit should also be completed for improvement of the telecom infrastructure in ER.

As suggested by CEA, a format has been circulated among ER constituents for furnishing the information of the respective systems for discussion in OCC Meeting. The format is enclosed at Annexure-E1.

OCC advised all the constituents to submit the information to ERPC as per Annexure-E1. OPTCL has submitted the required data

In the 139th PSOC meeting, IT stated that the Auditing is under process since 20th Nov'19 and will be completed today. The information has been submitted to ERPC in the prescribed format.

In the 140th PSOC meeting, SLDC stated that IT wing have forwarded the report in the prescribed format to ERPC for the Qr. ending Sept'2019.

In the 141th PSOC meeting IT stated that ISO certification for cyber security has been renewed for one year. Telecom may provide 3 Nos. CCTV, Fire alarm and biometric arrangement for their server room.

Sr. G.M (IT) /Telecom may update.

PART-D – Operational Issues

D.1: Non-compliance of drawal schedule by DISCOMs

Non-compliance of drawal schedule messages issued to Discoms during the month of **Jan'20**:

Sl. No	Name of Discom	No. of message issued	Over drawal (MU)	Deviation (%)
1	CESU	0	9.83	1.853
2	WESCO	0	1.607	0.272
3	NESCO	0	5.051	1.293
4	SOUTHCO	0	2.497	0.968
	Total	0	18.985	

It is noticed that **WESCO & SOUTHCO** were maintained their drawal as per the schedule while **CESU & NESCO** had overdrawn during the month. CESU has deviated **1.853%** followed by NESCO **1.293%** from the scheduled energy while **WESCO & SOUTHCO** have deviated **0.272 % & 0.968 %** respectively. DISCOMs may forecast their drawal in realistic approach to minimise deviation. Daily drawal profile of all DISCOMs is as indicated in the presentation.

SLDC/ Discoms may deliberate.

D.2: Compliance of CEA Regulations for Grid Connectivity of Renewable Energy Sources.

As per CEA (Technical Standards for connectivity to Grid) Regulations, 2007, dated 21st February 2007, the pertinent clauses 6 (iii) & 6 (iv) (b) of general Connectivity Conditions shall be applicable to all the Generating Projects including the renewable, which are getting connected to the Grid at voltage level of 33kV & above. Subsequently, CEA have notified the CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013 dated 30.09.2013. These Regulations are applicable for “Distributed Generation Resources”, which means A Generating Station feeding electricity into the System at voltage level below 33kV. Needless to mention that these Regulations also cover the renewable projects connected to the Distribution Licensee’s System at voltage level of below 33kV. The letter received from CEA is annexed herewith.

SLDC has already forwarded the Regulations & a letter received from DoE, Govt. of Odisha to the Distribution Licensees.

A meeting has been convened by Gridco in this regard with the RE generators, OPTCL, Telecom & SLDC. In the meeting, two nos of agencies presented their data acquisition logic from the RE sources. It was decided that each agency will take up a pilot project for data communication from one RE source to SLDC. On completion of the above project next course of application shall be decided.

A committee has been constituted with representatives of GRIDCO, O&M, Telecom & SLDC. This issue was also discussed in the 16th GCC meeting held on 09.08.2019. GRIDCO assured to make a demo of data communication from MGM Solar at Tangi to SLDC by end of August’19.

After successful demonstration of the data communication from the pilot Solar plant by Chemtrol, A meeting was convened by GRIDCO with all the Solar developers, Telecom, SLDC, OPTCL & DISCOMs to discuss the commercial issue.

In the 140th PSOC meeting GRIDCO stated that the rate offered by M/s Chemtrol for integration of real time solar data is being examined by the developers. The next meeting is scheduled to be held on 27th December’19 to discuss and finalize the issue.

In the 141th PSOC meeting GRIDCO stated that 15th January’20 was the dead line fixed for placing order by the developers. Data communication is expected by end of March’2020.

GRIDCO may deliberate the status.

D.3: Data communication from newly commissioned RE sources connected at 132 kV- SLDC

There are as many 8 Nos. of Solar projects with installed capacity of 272.5 MW have connected with OPTCL network through 132 kV lines. The real time data of these plants are yet to be received at SLDC control room. Since the generation quantum is quite substantial (to the tune of 0.6 MU during a day), this has an impact on real time generation monitoring.

In the 133rd PSOC meeting CGM (Telecom) stated that Vinto Solar data can be integrated only after laying of optical fiber, which has been proposed for PSDF funding

In the 137th PSOC meeting CGM (Telecom) stated that laying of optical fiber is expected to be completed by December'2019. DGM (Telecom) suggested that SLDC may write a letter to Vento Power (Solar) at Kesinga to explore the data communication, since all communication equipment are available with them. Data communication can be made through after visit of the service Engineer of the company.

In the 138th PSOC meeting, it was suggested that Telecom may ensure establishment of data communication facility before recommending for connectivity for any Solar Plant.

In the 139th PSOC meeting Telecom stated that data communication from all the Solar stations connected through 132 kV is expected by January'2020.

In the 140th PSOC meeting, DGM (Telecom) stated that the Despatch Instruction for OPGW has already been issued. Laying of optical fiber is expected by June'20. As suggested by DGM (Telecom), SLDC may write a letter to Vento Power (Solar) at Kesinga to explore the data communication, since all communication equipment are available with them.

In the 141th PSOC meeting DGM (Telecom) stated that Vento Solar at Kesinga has procured PLC in place of RTU resulting non- communication of data. It was decided that GRIDCO shall approach all the RE projects to speed up the process of data communication. Telecom may explore the process for laying of optical fiber.

SLDC /Telecom may deliberate the status.

D.4: Despatch Scheduling for RE Generation.

At present about 19 Nos of RE generating plants having 340 MW installed capacity operating in the State. None of the plants are furnishing day ahead schedule except 2-3 Nos. In absence of day ahead Declared injection Schedule, there is a substantial mismatch of day ahead generation planning. Also SLDC is not aware of the PPA made by GRIDCO with the Solar plants. As such, it is requested that GRIDCO may forward the copy PPA made with the Solar plants and insist the plants to submit day ahead DC in respect of their plants to SLDC in 15 minute blocks.

In the 139th PSOC meeting GRIDCO assured to forward the PPAs before next PSOC meeting also to write all the Solar stations to submit day ahead injection schedule to SLDC. The said documents are yet to be received by SLDC.

In the 140th PSOC meeting, SLDC stated that the PPAs made by GRIDCO with Solar plants have been received by SLDC. GRIDCO was requested to ask the Solar plants to forward their day-ahead generation schedule to SLDC.

In the 141th PSOC meeting it was decided that GRIDCO shall convene a meeting with solar developer to discuss the issue of day ahead scheduling of solar power injection.

GRIDCO may deliberate the status.

D.5: Furnishing of generation data of RES Plants-regarding.

Director (RPM), CEA vide letter No 1412 dated 18.02.2020 has sought plant wise and State wise generation details of RE plants for last 5 years in the prescribed format. Copy of the letter is enclosed as Annexure-1&2.

GRIDCO may submit the required information to SLDC for onward transmission to CEA.

GRICO/ SLDC may discuss.

D.6: Implementation of Automatic Meter Reading for OPTCL-Discom interface points.

In the 116th PSOC meeting, IT stated that out of 840 nos. of meters integrated, around data from 750 nos. of meters will be received each month. Data from the remaining 90 meters are to be collected manually.

In the 138th PSOC meeting IT stated that software development is under progress and expected to be completed for CESU area energy meters.

In the 139th PSOC meeting IT stated that M/S TCS has assured to extract 90% of meter data from CESU & SOUTHCO interface meters.

In the 140th PSOC meeting IT stated that the discrepancies have been intimated to M/s TCS. As per TCS report, they are not able to extract meter data on 1st day of the month due to removal of optical fiber link from the meter for data downloading.

TTPS (NTPC) requested to provide a port for them for checking the data. CGM (O&M) suggested that TTPS may write to GRIDCO in this regard. O&M & GRIDCO shall take a decision after discussion.

In the 141th PSOC meeting IT stated that UAT has been started since 27th January'2020. It was suggested that TTPS may write GRIDCO for providing the port to capture data for monitoring purpose.

IT / SLDC/ GRIDCO may update the status

PART E: OPERATIONAL PLANNING**E.1: Commissioning status of new Transmission elements.**

The status of commissioning of new transmission elements deliberated in the last meeting is as follows:

Sl. No	Transmission element details	Present Status
1	220 kV Jayanagar-Jeypore(PG) 2nd DC line	January'2020. Idle Charging from Jayanagar end will be done since bay at Jeypur PG is not ready.
2	400 kV Meramundali-Mendhasal 2nd ckt.	January'2020
3	220 kV Pandiabili-Pratapsasan line	June'20
4	132 kV Pratapsasan-Phulnakhara line	February'20
5	220/132/33 kV, Pratapsasan S/S	March'20
6	220/33 kV, Deogarh S/S	March'20
7	132/33 kV, Maneswar S/S	March'20
8	132/33 kV, Boriguma S/S	Sept'20
9	220/33 kV, 2x20 MVA Baliguda S/S	Forest clearance awaited
10	220/33 kV, 2x20 MVA Kalimela S/S	Forest clearance awaited

11	220/132/33 kV, Goda Chhak S/S (320 MVA)	March'20
12	220/132 kV Kesinga S/S	Mar'20
13	132/33 kV R.Udyagiri S/S	Mar'20
14	220/33 kV Laxmipur S/S 2nd 20 MVA Tfr.	February'2020
15	132/33 kV, Mancheswar GIS	February'2020
16	132/33 kV, Satasankha S/S	March'2020
17	220/33 kV, 2x20 MVA, Govindapali S/S	Forest clearance awaited

The status of 33 kV bays and takeoff arrangement by DISCOMs are as tabled

SI No.	Name of Project	DISCOM	Voltage	Date of Charging	Bays Available	Bays utilised
1	Atri	CESU	220/132/33	2/24/2016	4	Nil
2	Chandaka - B	CESU	220/132/33	3/28/2017	4	Nil
3	Muniguda	Southco	132/33	11/29/2017	4	Nil
4	Baragarh New	Wesco	220/132/33	3/21/2018	1	Nil
5	Aska New	Southco	220/132/33	3/31/2019	5	1
6	Betanati	Nesco	132/33	4/19/2019	3	1
7	Kasipur	Southco	220/33	6/30/2019	2	Nil
8	Jayapatana	Southco	220/132/33	7/11/2019	4	Nil
9	Agarpada	Nesco	132/33	8/30/2019	5	Nil
10	Patangi	Southco	132/33	9/15/2019	4	2
11	Konark	CESU	132/33	6/29/2015	4	1
12	Mania	CESU	132/33	3/31/2016	5	1
13	Bangiriposi	Nesco	132/33	10/3/2016	4	1
14	Infocity-II	CESU	220/33	12/23/2016	4	1
15	Bhogarai	Nesco	132/33	3/28/2017	4	1
16	Tirtol	CESU	132/33	1/5/2018	5	1
17	Chandbali	Nesco	132/33	2/20/2019	4	1
18	Unit-8, BBSR	CESU	132/33	4/1/2019	5	1
19	Samagara	CESU	220/132/33	7/14/2015	5	2
20	Marshaghai	CESU	132/33	10/16/2015	5	2
21	Malkangiri	Southco	220/33	3/27/2017	4	2
22	Khajuriakata	CESU	132/33	3/28/2017	5	2
23	Podagada	Southco	132/33	2/9/2018	4	2
24	Kantabanji	Wesco	132/33	2/28/2018	5	2
25	Ghens	Wesco	132/33	4/13/2018	4	2
26	Khuntuni	CESU	132/33	5/31/2018	5	2
27	Narasinghpur	CESU	220/33	8/24/2018	5	2
28	Udala	Nesco	132/33	9/16/2018	5	2
29	Keonjhar	Nesco	220/33	12/31/2018	5	2
30	Chikiti	Southco	132/33	2/25/2019	4	2

In the 140th PSOC meeting AGM (Const.) stated that 2 Nos. 40 MVA Transformers have been provided in the proposed Maneswar S/S. WESCO may divert all loads from Chipilima PH S/S to Maneswar S/S to make free the Chipilima PH S/S. SLDC suggested to instruct and impart training the executives deployed at the newly charged S/Ss for extraction of the meter data and forward to SLDC. DGM (Const.) suggested that SLDC may write a letter to CGM (Const.) in this regard

In the 141th PSOC meeting WESCO stated that due to shortage of funds they cannot construct 33 kV line. It was suggested that CGM (Const) may convene a meeting to review the take-off arrangement.

CGM (Construction) / DISCOMs may deliberate

E.2: Major Events in the month of January'20

1. On Dt. 23.01.20 at 00:37 Hrs -160 MVA, 220/132 kV Auto Transformer -II at Jayapatna S/S charged.
2. On Dt 22.01.20 at 13:36 Hrs – 2nd 40 MVA, 132/33 kV Power Transformer charged at GIS, Khuntuni.
3. On dt. 27.01.20 at 17:55 Hrs - 132 kV Bolangir (New) -Sonepur feeder charged through “T” arrangement in 132 kV Bolongir (Old)- Sonepur ckt at Loc no-14.

Members may note

E.3: Important Grid Incidences during the month of January'20.

There was no major incidences occurred during the month of January'20

E.4: Outage of major transmission Elements during the month of January'20. (above 10 hrs).

Sl No	Transmission line / element	Tripping Dt/time	Restoration Dt/time	Reason
1	20 MVA Power Transformer – I, Samangara	02.01.20/ 00:35 Hrs	02.01.20/ 11:25 Hrs	33 kV side Y-ph LA failure
2	132 kV Jajpur Road- Anandpur ckt-I	15.01.20/ 21:03 Hrs	16.01.20/ 14:10 Hrs	Y ph LA failure.

E.5: Prolonged outage of Transmission elements

Sl No	Transmission line / element	Date of outage	Reason	Expected date of restoration
1	220 kV Samangara – Pandiavil ckt –I& II	03.05.19	Tower collapsed during the severe cyclonic storm FANI.	Entrusted to PGCIL

O&M may discuss

E.6: Review of Outage Program of State Generators for the month of March'20:

Tentative Outage programme for State Generators for the month of **March'20**

Sl.	Station	Unit	Period	Remarks
1	Burla	# 1 # 5 # 6 # 7	14.03.18 to continue 25.10.16 to continue 16.10.15 to continue 06.12.19 to 29.02.20	T&G coupling cover water leakage Under R,M & U Under R, M & U Annual Maintenance
2	Balimela	# 1 # 2 # 6	05.08.16 to continue 20.11.17 to continue 03.03.20 to 28.03.20	Under R,M work Under R,M work Annual Maintenance
3	Rengali	# 5	01.03.20 to 15.04.20	Annual Maintenance

OHPC may deliberate

E.7: Generation Program for the month of March'20.

Generation schedule for the month of March'20 furnished by OHPC are given below.

Name of Hydro Gen. Station	Generation Program (MW)		Reservoir Level as on 01.02.2020	Reservoir Level as on 01.02.2019	MDDL	High Flood Reservoir Level
	Mar'20 (1 st fortnight)	Mar'20 (2 nd fortnight)				
HPS-I, Burla	50	50	626.37 ft.	622.58 ft.	590 ft.	630 ft.
HPS-II, Chiplima	35	35	-	-	-	-
Balimela	190	190	1502.60 ft.	1503.20 ft.	1440 ft.	1516 ft.
Rengali	70	70	122.45 mtr.	117.20 mtr.	109.72 mtr	123.5 mtr.
U.Kolab	130	130	855.69 mts.	854.22 mtr.	844 mtr	858 mtr.
U. Indravati	300	300	639.15 mtr.	638.00 mtr.	625 mtr	642 mtr
MKD (O/D)	30	30	2741.65 ft.	2739.55 ft.	2685 ft.	2750 ft.
TOTAL	805	805				

Generation schedule may change depending on inflow & availability of machine.

SLDC / OHPC may deliberate

E.8: Anticipated power generation and demand for the month of March'20.

Sl. No	Discom	Average	Peak
1	CESU	1050	1200
2	WESCO	1000	1150
3	NESCO	800	900
4	SOUTHCO	450	500
5	Total Discom	3300	3750
	System Loss & others	200	250
	Total Demand	3500	4000
Availability			
1	Hydro	805	1100
2	State Thermal	1300	1300
3	IPP, small hydro & RE	350	300
4	ISGS share (including OA & purchase)	900	1000
5	CGP support (OA)	300	300
6	Total availability	3675	4000
7	Surplus / Deficit	175	0

Members may discuss.

PART F: OTHER ISSUES**F.1: Date and Venue of the next (143rd) PSOC meeting.**

ANNEXURE-1



भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
नवीकरणीय ऊर्जा परियोजना प्रबोधन प्रभाग
Renewable Energy Project Monitoring Division

सं.के.वि.प्रा./योजना/आर.पी.एम./6/1/2019 / 14/2

दिनांक: 18.02.2020

To,

(As per attached list)

Sub: Furnishing of generation data of RES Plants.-regarding

CEA is in the process of analysing the generation data of Renewable Energy plants and finding out the trends in installed capacity and variation of generation). In this regard, plant wise and state wise generation details of last 5 year from 2013-14 to 2018-19 on annual basis is required.

It is requested that requisite information pertaining to your state may please be furnished in excel format (format attached) by 28 February 2020 at the email id cerpmcea@gmail.com/ce-rpmcea@cea.nic.in.

Encl: As above

O.P. Meena
Director (RPM)

Copy to: Deputy Director General, E&C Wing, CEA w.r.t. letter no CEA/E&C/DDG/CORP/2019 dated 10.02.2020.

ANNEXURE-2

